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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,888	04/05/2002	Kazuhiro Nishiyama	OGOH:113	6854

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EXAMINER

DI GRAZIO, JEANNE A

ART UNIT PAPER NUMBER

2871

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,888

Applicant(s)

NISHIYAMA ET AL.

Examiner

Jeanne A. Di Grazio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 41-97 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-35 and 41-97 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Status

There are currently 92 claims pending in this application.

Claims 36-40 have been cancelled by Preliminary Amendment.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7 drawn to a method of sealing a liquid crystal injection port classified in class 349 subclass 190.
- II. Claims 83-86 drawn to methods of removing orientation films at predetermined portions and orientation methods on the remaining portions of the films classified in class 349 subclass 187 or 191.
- III. Claims 87-89 drawn to a method of manufacturing a black matrix classified in class 349 subclass 187.
- IV. Claims 90-97 drawn to methods of forming thin film transistors classified in class 349 subclass 187 and 42 and 43.

Invention IV of this application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, claims 90 and 94 drawn to an insulation film formation step formed only on the switching element.

Species B, claims 91 and 95 drawn to an insulation film formation step formed only on the signal line and switching element.

Species C, claims 92 and 96 drawn to an insulation film formation step formed only on the scanning line and switching element.

Currently, claims 93 and 97 drawn to an insulation film formation step formed only on the signal line, scanning line, and switching element appear generic to Species A-C.

V. Claims 8-11 and 12 drawn to a liquid crystal seal (anaerobic seal) classified in class 349 subclass 153.

VI. Claims 13-18, 60, 66, 68, and 61-65 drawn to a black matrix classified in class 349 subclass 110.

Invention VI of this application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, claim 13 drawn to a neutralization electrode with pixel and common electrodes on opposite substrates.

Species B, claim 14 drawn to a neutralization electrode with pixel and common electrodes formed on one of two substrates.

Species C, claim 15 drawn to a neutralization electrode with pixel and common electrodes formed on a substrate and opposing electrode formed on the other substrate.

Currently, claims 60, and 66-68 may be generic to Species A-C.

VII. Claims 19-35 drawn to a diffuser classified in class 349 subclass 112.

Invention VII of this application contains claims directed to the following patentably distinct species of the claimed invention:

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Species A, claims 19, 20, 24-29, 31-33 and 35 drawn to a black matrix as a diffuser.

Species B, claims 21, 22, and 34 drawn to an electrode as a diffuser.

Species C, claim 23 drawn to an opposing electrode as a diffuser.

Currently, there appear to be no claims generic to the species.

VIII. Claims 41-44 drawn to a holding voltage in relation to various electrodes, classified in class 349 subclass 34.

Invention VIII of this application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, claim 41 drawn to a holding voltage in relation to gates.

Species B, claim 42, drawn to a holding voltage in relation to pixel electrodes.

Species C, claim 43, drawn to a holding voltage in relation to opposing electrodes and film thickness.

Species D, claim 44, drawn to a holding voltage in relation to scanning signal or gate.

Currently, there appear to be no claims generic to the species.

IX. Claims 45-50, 57, and 58 drawn to in-plane LCD classified in class 349 subclass 141.

X. Claims 51-56 and 59 drawn to a storage capacitor classified in class 349 subclass 38.

XI. Claims 69-82 drawn to a neutralization electrode and insulating film arrangement classified in class 349 subclass 42 or 43.

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The inventions are distinct, each from the other because of the following reasons:

Inventions I and V are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the method recited in claims 1-7 can be used to make various seals that exclude foreign matter and not just the seal for a liquid crystal device as recited in claims 8-11 and 12.

Inventions I, V and inventions II-IV and VI-XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the inventions are different because a particular seal resin is not necessarily required for the devices and methods recited in the other inventions.

Inventions II and inventions I, III-XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case inventions recited in II and the remaining inventions are not related because any method of removal of an alignment film and or method of orientation can most likely be used in inventions I and III-XI.

Inventions III and VI are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be

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made by another and materially different process (MPEP § 806.05(f)). In the instant case the method of invention III can be used to manufacture other light shielding films.

Inventions IV and XI are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, TFTs can be manufactured by various configurations of insulating films with respect to the various electrode structures.

Inventions VII and inventions I-VI and VIII-XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions I-VI and VIII-XI do not require a scattering film.

Inventions VIII, IX, and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects and functions.

Because these inventions are distinct for at least the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect Invention I, II, III, IV, V, VI, VII, VIII, IX, X, or XI or a single disclosed species (IV: A, B, or C ; VI: A, B, or C ; VII: A, B, or C ; VIII: A, B, C, or D). Applicant is advised that a reply to this requirement must include an

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identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (703)305-7009.

The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Jeanne Andrea Di Grazio

Robert Kim, SPE

JDG


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